

**Statement of Jessie Hill Roberson**  
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**before the**  
**Committee on Energy and Natural Resources**  
**United States Senate**  
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Mr. Chairman and Members of the Committee, I take great pleasure and pride today to discuss the transformed Environmental Management Program in the Department of Energy, our progress in implementing cleanup reform, and the importance of sustaining this momentum for the benefit of our workers, our communities, our environment, and the generations to come.

All too often, we forget why the Environmental Management Program was created.

This program was created in 1989 to deal with the environmental legacy created by nearly a half-century of nuclear weapons production and nuclear research activities, activities that were conducted at over 100 sites in 32 states of this Union. In the United States Government's Financial Report, this environmental legacy was recognized as the third largest liability of the Federal Government, behind only Federal Employee and Veteran's Benefits and the Federal Debt. In fiscal year 2001, the cleanup cost associated with environmental damage and contamination was reported by the Treasury Department to be \$306.8-billion. The Environmental Management program was the largest component of that liability.

**Our nation fought and won the Cold War.** In its wake, a vast legacy was created including approximately 88 million gallons of highly radioactive liquid waste in 239 tanks, with some capable of holding more than 1-million gallons each. Many were built during the Manhattan Project or in the early stages of the Cold War and some of these are known to have leaked. Additionally, this nuclear legacy includes over 20 metric tons of plutonium, many tons of enriched uranium, three-quarters of a million tons of depleted uranium, 2,400 metric tons of spent nuclear fuel, 108 metric tons of plutonium residues and over 140,000 cubic meters of transuranic waste. All of this needs to be remedied.

In addition, there are over 3,000 facilities that supported and housed the nuclear weapons production program that have to be addressed. Many of these facilities were built in the in the 1940's, 50's, and 60's. In fact, we have one facility, at Oak Ridge, that has over 40 acres of contaminated floor space under a single roof. Many are radiologically contaminated and have beryllium, asbestos, or other forms of chemical contamination. We need to also remediate the contamination from under and around these facilities that resulted from the many decades of operation.

We are extremely fortunate to have some of the best trained and most competent workers in the world to complete this job. The work is difficult requiring training, engineering controls, procedures, and personnel protective equipment that few can imagine. To get into a process area

at one of our sites requires passing through security, radiological, and nuclear checkpoints. To stabilize just a kilogram of plutonium requires a safety and security infrastructure that includes dozens of security guards, radiological control technicians, nuclear criticality engineers, ventilation engineers, plutonium chemists, and trained nuclear operators wearing layers of anti-contamination clothing, respirators, thermo luminescent dosimeters (TLDs), leaded rubber gloves which are in a glove box that is specially designed to keep the radioactive contamination inside and controlled to prevent a nuclear criticality. This represents but a single work task.

This legacy is here today. Doing nothing or keeping the status quo only makes things *less* safe. The infrastructure is only getting older and more costly to maintain. This infrastructure across the complex costs us literally billions of dollars every year just to maintain. Doing nothing is simply not an option.

Three years ago, the cleanup program was badly in need of refocusing. Despite the fact that we spent more than \$60-billion on this program in the 1990's and our projected cost to complete this program increased in FY01, little in the way of real, measurable risk reduction was taking place. We embarked on a program that at its roots was very simple; change this program from risk management to accelerated risk reduction that would be safe for the workers, protective of the environment, and respectful to the taxpayers. We insisted that our progress be measurable and that we be held accountable for our performance.

Today, I can report to you that we have delivered on this commitment and more. We are putting in place the systems and processes to complete this work. While I will discuss site-by-site specific accomplishments later in my testimony, overall in the last three years, we have taken significant risk out of the system, making communities and the environment safer. In less than three years, we have reduced reportable accident and injury rates of our workers by over 35 percent; our workforce boasts one of the best safety records in government today despite that fact that they deal with some of the most dangerous and hazardous materials and operations known to man. In less than three years, the Department has reduced its environmental liability by a total of \$55 billion as documented by the United States Government Financial Reports of Fiscal Year 2001, 2002, and 2003. These reports show that this is the only major program in government that actually decreased its financial liability in that timeframe. In less than three years, we have shortened the time to complete this work by 35 years, essentially eliminating the need for another generation of Cold War cleanup workers to finish the job.

This program has delivered on its commitment. This program has demonstrated success that is good for our workers and our communities; is good for our environment, and is good for our country.

When I took this job in July 2001, Secretary Abraham made it clear that we could, and indeed should, expect more real progress at every site. The Secretary was not satisfied with a plan that called for a timetable of some 70 years to complete and at a potential cost of \$300 billion. "That is not good enough for me", he said, "and I doubt it is good enough for anyone who lives near

these sites.” To that end, he directed a *Top to Bottom Review* of the entire program. We completed that review in February 2002 and for some skeptics, the recommendations were viewed as unorthodox and flew in the face of a mindset comfortable with a program whose focus was mainly compliance and risk management. The Top to Bottom Review exposed clear discrepancies in accomplishing our vital mission of risk reduction. Innovative actions in all elements of the EM program were needed to make this program viable.

Since the release of the Top-to-Bottom Review of the EM program we have taken decisive steps to transform this once faltering program. We have introduced dynamic reforms, delivered fundamental change and achieved significant improvements in health, safety, and environmental protection.

There are some who say that accelerating cleanup means that we are cutting corners and exposing our workers to more hazards. That is not true—in fact, the opposite is the case. Our best performing sites are also our safest sites. EM is no different than private industry; improved safety performance is a necessary precursor for improved operational performance. In order to accomplish our accelerated risk reduction and cleanup mission, we must improve safety performance first. Safety and results go hand in hand. Neither can be compromised if we are to reach our goals. We are committed to continuing to instill this philosophy in every worker’s day-to-day decisions from start to finish of every project. For example in August 2001, EM’s Total Reportable Cases (TRC) and Lost Workday Cases (LWC) were 1.9 and 0.8 per 100 worker-years (200,000 hours), respectively. TRC and LWC are standard OSHA tools used to measure safety performance across all industry. Since then we have reduced our Total Reportable Cases to 1.1 and Lost Workday Cases to 0.5. These rates are significantly better than private industry, which OSHA reported in 2002, had a Total Reportable Cases of 5.3 and Lost Workday Cases of 1.6. Indeed, our TRC’s and LWC’s are among the best in the federal government. The construction industry alone had rates of 7.1 for Total Reportable Cases and 2.8 for Lost Workday Cases in 2002. We have not nor will we stop paying attention to safety. We will continue to demand improvement and hold ourselves accountable to the highest standards. Success of our program begins and ends with safety performance.

There are others who say that accelerated cleanup means a dirty cleanup. That could not be further from the truth; we have taken decades off the time to complete cleanup at most sites and will complete the entire EM cleanup a generation earlier than previously planned. Removing the hazards and source terms significantly before anyone had ever hoped or planned is good for the environment. Our cleanup will be protective of the environment and fully support the future uses of the site. Our cleanup standards are based on good science, and require full review and approval by the state and federal regulators. Just as important, we work with our communities stakeholders day-in and day-out, the recipients of the benefits of cleaning up and closing a site earlier.

Others claim that we are compromising national security in our cleanup. We are on schedule to meet all the new security requirements as directed by the Secretary. Just as important, we are

safely and securely disposing of radioactive waste, and we are consolidating our once scattered special nuclear materials inventory into fewer, more robust and secure locations.

There are still others who say that we have delivered less cleanup than we had promised. The truth is at nearly every site we are doing more *real* cleanup today than anyone could have ever imagined in the 1990's. We have dug up buried waste in Idaho; we are tearing down contaminated facilities at Savannah River. Rocky Flats, the facility that manufactured every single plutonium pit in the US stockpile, has no more special nuclear material. Our West Valley Site in New York shipped its spent nuclear fuel off-site to a more secure location. Prior to the Top to Bottom Review, EM had lost focus on its core mission, the mission that the program was established to solve---addressing the cleanup of the Nation's Cold War nuclear weapons research and production legacy. In the last 3 years, we have established a new floor of performance not seen before in this program and our strategy has begun to return on the investment that we made. Some examples of this progress include:

At the Savannah River Site, we have

- Increased waste loading in the Defense Waste Processing Facility (DWPF) by over 30 percent, resulting in a one-third reduction in the number of canisters to be produced that will require deep geologic isolation.
- Completed packaging of all plutonium metal and initiated plutonium-oxide packing operations.
- Reduced liquid waste inventory volume by over 1 million gallons.
- Repackaged and disposed of the worst 10 percent of the site's depleted uranium.
- Completed de-inventory and commenced deactivation of the F-Canyon facility.
- Completed dissolving plutonium residues through the H-Area HB-Line
- Attained a shipping rate of 2,000 cubic meters of TRU waste per year.
- Emptied two spent nuclear fuel basins, consolidating all material into L-Basin
- Demolished 48 facilities including 46 industrial facilities and 2 nuclear buildings

At our Hanford Site, we have

- Completed waste retrieval from C-106, the first at the Hanford tank farms; retrieval of tank S-112 is 83 percent complete; retrieval equipment installations are nearing completion on the next four tanks.
- Removed over 99 percent of pumpable liquids from single-shell tanks and over three million gallons to date. Today, only 40,000 gallons remains to be pumped from one tank.
- Placed all plutonium in safe, stable 3013 storage containers.
- The Waste Treatment Plant (vitrification plant) construction is over 25 percent complete.
- Stabilized and packaged all plutonium residues.
- Commenced Fast Flux Test Facility deactivation on April 7, along with draining the sodium coolant.

At the Rocky Flats Environmental Technology Site, we have

- Completed 80 percent of the project and are firmly on track for 2006 closure.
- Removed over 85 percent of the glove boxes -1,241 of 1,457.
- Completed removal of all weapons grade special nuclear material.
- Demolished over 350 structures.

At the Idaho National Laboratory, we have

- Emptied and cleaned five large waste pillar and panel tanks.
- Completed pilot waste excavation work at Waste Area 7.
- Deinventoried 3 spent nuclear fuel pools, placing over 93 percent of the fuel at Idaho in safe, dry storage with the remaining fuel being stored in the state of the art CPP-666 facility.
- Constructed and commenced operation of a 500,000 cubic meter disposal facility for the disposal of remediation waste.

In Ohio, we have

- Removed all legacy transuranic (TRU) waste from the Mound Site.
- Removed all Plutonium-238 from the Mound Site and all nuclear material from the Fernald Site.
- Decontaminated and demolished 57 percent (77) of the facilities at Mound and 75 percent (157) of the facilities at Fernald.

At the West Valley Demonstration Project Site, we have

- Removed all spent nuclear fuel.
- Emptied and decontaminated the spent nuclear fuel basin.
- Completed vitrification (275 high-level waste canisters generated) and melter shutdown.

At Oak Ridge, we have

- Completed uranium converter removal operations in Building K-29, 31, and 33 at East Tennessee Technology Park.
- De-fueled tower shielding reactor.
- Removed all EM spent nuclear fuel from the site.
- Disposed of over 40,000 cubic meters of low-level and low-level mixed waste.

At the Waste Isolation Pilot Plant, we have

- Disposed of nearly 20,000 cubic meters of TRU waste, safely receiving 2,600 waste shipments involving more than 2.6-million highway miles.
- Completed removal of TRU waste at four small-quantity sites and recently initiated TRU shipments from the Nevada Test Site.
- Closed Panel 1; Panel 2 is receiving waste; Panel 3 is under construction.
- Submitted our Recertification Application signifying five years of safe operation.

I can go on and on with examples of accelerated risk reduction and cleanup. These are visible, these are real and these results demonstrate our ability to accelerate schedule and reduce life cycle cost while showing to our public and surrounding communities the Department's commitment to improve worker safety, reduce health risks and eliminate environmental hazards.

So you may have a better comprehension of the magnitude of our cleanup results, I would like to insert for the record a copy of our recent corporate performance measures. EM's Performance Measures is a compilation of the program's sixteen complex-wide performance measures. As you can see, we can deliver significant risk reduction and cleanup and, as I stated earlier, in combination with improved safety performance. Accelerating risk reduction and cleanup, in concert with exceptional safety performance, accomplishes consequential outcomes important to the public, our communities, and for the generations that follow us.

#### We Have Our Challenges Too

As we continue to challenge the status quo, we may be confronted with legal actions and court decisions that will direct us to alter or modify our activities from the accelerated cleanup and closure path. We will continue to work diligently with all concerned parties to avoid interruptions in reducing risk and advancing cleanup for the public.

We expect to be challenged on our delivery of Government Furnished Services and Items, or GFSI. We are accountable on delivery of GFSI and we expect to be held to our commitments.

Also, we have challenged our managers at all levels to stay true to our commitment and employ our corporate performance measures and baselines as an accountability and success gauge assessing our progress as well as a tool that alerts us when management action or intervention is warranted.

With the Idaho District Court decision on Waste Incidental to Reprocessing, the Department's ability to proceed prudently with accelerated risk reduction for some activities is drawn into question. The decision makes it difficult, if not impossible, for us to undertake all of the actions planned at Idaho, Hanford and Savannah River Site to aggressively reduce risks posed by wastes stored in tanks at those sites – actions we had committed to take, in agreement with our host states, before the court decision.

The Senate agreed to provisions, which if enacted into law, would provide fiscal year 2005 funding and enable DOE to proceed with the full suite of previously planned accelerated cleanup activities for the Savannah River Site tank farms, pursuant to plans developed in conjunction with the State of South Carolina. In addition, the Senate agreed to allow FY 2005 funding for certain critical tank waste cleanup activities at Idaho and Hanford, pursuant to plans approved by the states of Idaho and Washington.

## CONCLUSION

Three years ago we started down this path; however, we must continue to better our performance and to look beyond the gains we have made to achieve our vision and the results that will truly be groundbreaking for the benefit of the generations that follow us. I have challenged our partners in cleanup; our workforce, our contractors, our regulators, our communities, and all those interested in joining us in our vision of cleanup to put their most innovative ideas and people forward. We must not lose our momentum that has been established through collaboration and a singular focus on delivering meaningful results for the American public. We are committed to employ our resources to show meaningful results.

The job is not done until it is done. We cannot be complacent; we must continue to do better. It is not done when we develop a plan---it is not done when we agree to a milestone—it is not done when we ask for funding ---it is not done when we sign a contract ---it is not done when we get money. It is not done until it's done and there is positive and measurable risk reduction for the investment.

The only measure of success will be positive, measurable performance. The longer we wait, the greater the potential risk. I ask for your continued support in this very important work. We are safer today than we were last year and we must stay the course so we are safer next year than today. The potential is there to lose what we have gained should we fail to stay true to our commitments; a cleanup that is safe for the worker, protective of the environment, and respectful of the taxpayers. I look forward to working with Congress and others to achieve this worthy goal. I will be happy to answer questions.

**EM's  
Complex Wide Performance Measures\***

Performance Measure	Unit	FY 2003 Target	FY2003 Actual	FY2004 Target	FY2005 Target	Actual Lifecycle Through FY2003	Lifecycle Scope
Pu packaged for long-term disposition	# Cont.	2,836	3,065	1,323	165	4,549	5,850
eU packaged for disposition	# Cont.	277	201	925	669	2,054	9,101
Pu/U residues packaged for disposition	kg Bulk	934	1,140	254	76	107,659	107,782
DU & U packaged for disposition	MT	1,815	4,551	0	0	7,651	742,149
Liquid Waste eliminated	gallons (1000s)	700	0	1,300	1,900	0	88,000
Liquid Waste Tanks closed	# Tanks	1	0	9	9	2	241
HLW packaged for disposition	# Cont.	130	115	250	250	1,727	18,735
SNF packaged for disposition	MTHM	857	807	633	1	1,446	2,420
TRU disposed	m3	4,522	6,361	12,952	13,678	14,081	141,314
LL/LLMW disposed	m3	75,030	118,362	89,815	107,067	402,568	1,155,360
MAAs eliminated	# MAA's	0	1	1	1	7	14
Nuclear Facility Completions	# Facs.	2	4	6	14	22	518
Radioactive Facility Completions	# Facs.	7	24	39	66	149	799
Industrial Facility Completions	# Facs.	49	107	105	201	653	2,647
Geographic Sites Eliminated	Sites	2	1	0	2	76	114
Remediation Complete	# Rel. Sites	214	258	200	283	5,186	10,374

\*Each of EM's 16 corporate performance measures is quantitative and focuses on those materials, wastes, environmental media, and facilities that comprise the majority of the risk to environment, public health, and safety. When these measures are completed, the EM program has accomplished its mission. Each measure is tracked in the context of the total life-cycle on 2035 accelerated schedule. The corporate performance measures are under strict configuration control, thereby establishing performance expectations and accountability. Through strict configuration control, EM is able to make crucial corporate decisions that will keep the program on track, monitor and control costs, and manage site closure expectations.

Consistent with Rev 9 of the Gold Chart (4/22/04)